



GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: B
GEOGRAPHY, GEO-SCIENCES, ENVIRONMENTAL & DISASTER
MANAGEMENT

Volume 14 Issue 8 Version 1.0 Year 2014

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals Inc. (USA)

Online ISSN: 2249-460X & Print ISSN: 0975-587X

Presence and Functionality of Rangeland Management Institutions: The Case of Insindi Smallholder Resettlement in Gwanda, Zimbabwe

By Onalenna Gwate

Lupane State University, Zimbabwe

Abstract- The Fast Track Land Reform in Zimbabwe adversely affected environmental management. The study sought to establish the presence and functionality of institutions for rangeland management in Zimbabwe in Fast Track Resettlement areas. Data was collected using questionnaires and interviews. A total of 30 questionnaires were administered on each household, randomly selected to get their perspective on rangeland management issues. Key informants were also interviewed to understand the trajectories of rangelands management. Data from questionnaires was analyzed using the Statistical Package for Social Sciences (SPSS). Results revealed that there was a dearth of relevant institutions for the management of rangelands as a common property resource. It was concluded that lack of robust institutions, particularly in Fast Track Resettlement areas was at the core of rangeland deterioration. In order to enjoy the full benefits of the fast track land reform, robust technical support has to be availed to reduce environmental degradation taking place in the area.

Keywords: *natural resources, land reform, institutional development, rangelands, common property resource.*

GJHSS-B Classification : *FOR Code: 040699*



Strictly as per the compliance and regulations of:



Presence and Functionality of Rangeland Management Institutions: The Case of Insindi Smallholder Resettlement in Gwanda, Zimbabwe

Onalenna Gwate

Abstract- The Fast Track Land Reform in Zimbabwe adversely affected environmental management. The study sought to establish the presence and functionality of institutions for rangeland management in Zimbabwe in Fast Track Resettlement areas. Data was collected using questionnaires and interviews. A total of 30 questionnaires were administered on each household, randomly selected to get their perspective on rangeland management issues. Key informants were also interviewed to understand the trajectories of rangelands management. Data from questionnaires was analyzed using the Statistical Package for Social Sciences (SPSS). Results revealed that there was a dearth of relevant institutions for the management of rangelands as a common property resource. It was concluded that lack of robust institutions, particularly in Fast Track Resettlement areas was at the core of rangeland deterioration. In order to enjoy the full benefits of the fast track land reform, robust technical support has to be availed to reduce environmental degradation taking place in the area.

Keywords: *natural resources, land reform, institutional development, rangelands, common property resource.*

I. INTRODUCTION

The history of land reform in Zimbabwe dates back to the coming in of white settlers in 1890s (Marongwe, 2002). However, this study would focus on post independence land reforms particularly the Fast Track Land Reform (FTLR) as critical in explaining the unprecedented rangeland deterioration. From 1980 until 1999 government acquired 3.8 million ha of commercial farmland and resettled 71000 families (Feltoe, 2004). This programme was supported by a robust development package. It is also alleged that during this time government owned 300,000 ha of former commercial farmland which had not been allocated for resettlement. Many of the early resettlement programs were not successful because of inadequate planning, failure to provide appropriate infrastructure and agrarian support systems. In March 2000, it was revealed that 272 state owned farms had been leased to high ranking civil servants and a coterie of ruling party cadres (Feltoe, 2004). Up to 1990,

government had failed to come up the requisite pieces of legislation to engender a sustainable land reform. As such commercial farmers used this failure by government to follow the procedure laid out in the acquisition legislation in order to obstruct and delay the acquisition for resettlement.

The year 2000 marked a turning point in Zimbabwe's history of land and agrarian reform. Hitherto, there was talk of the land question, but now talk was on the land as an answer to economic problems. The government acquired about 5 million hectares and resettled about 46111 families on 2.5 million hectares under the fast track land reform programme (FTLRP) (Feltoe, 2004). Land audits indicate, that by February 2006, about 156,000 households were resettled on 6,800,000 hectares. The FTLRP was associated with the modification of existing settlement models in the form of a communal subsistence farming model A1 (either as a villagised or self contained model variant) and commercial farming model A2 (with variants of small, medium, large and peri-urban farm models). The programme occurred under adverse macroeconomic and unstable political conditions (Chigumira, 2010). Unlike previous resettlement programmes, the FTLR was not properly planned. Consequently, people were resettled without first laying out development infrastructure and were not psychologically prepared to live in relatively pristine environments. Environmental issues were relegated to the background during the land reform in Zimbabwe. There is, generally, a dearth of skills and techniques for sustainable rangeland utilization. The result has been intense disturbance leading to environmental degradation through soil erosion, deforestation and overgrazing. Deforestation has been on the increase particularly in the resettlement areas due to clearing of land for expansion of agriculture, collection of firewood for subsistence as a well as for commercial purposes as a response to the demand created by the rise in electricity charges and the shortage of paraffin. Soil erosion is essentially driven by poor farming methods bedeviling smallholder resettlement schemes. The backlash of environmental degradation is more evident

Author: Department of Geography and Population Studies, Lupane State University, Raylton, Bulawayo, Zimbabwe.
e-mail: onalennag37@gmail.com

in rangelands of marginal areas. Given that prime beef in the country come from arid and semi arid regions like Matabeleland, rapid environmental deterioration has serious ramifications on beef production in the country. As such, the problem may not only be felt by farmers, but the entire Zimbabwean population as beef is also a critical foreign currency earner. Therefore, the study sought to establish the presence and functionality of institutions for rangelands management in Insindi smallholder resettlement area.

II. LITERATURE REVIEW

a) *Causes of rangelands degradation*

Rangeland degradation is influenced by a number of factors. Haji-Rahimi and Ghaderzadeh (2008) identified inappropriate animal husbandry system as one of the major issues promoting rangeland degradation. The transhumance system was noted as a key driving force in rangeland degradation. However, the Africa Centre for Holistic Management in Victoria Falls, Zimbabwe has demonstrated that overgrazing is not in anyway related to an increase in stock numbers. Neely and Butterfields, (2004) argue that overgrazing is a function of time and not stock numbers and occurs when an animal returns to a grass plant before it has had time to fully regenerate. When animals are allowed to roam freely, they will indeed revisit plants before the particular plants recover. However, when animals are herded to ensure that they do not re-graze the plants before they are fully recovered, then overgrazing is no longer an issue. Adverse climate change may reduce the productivity of rangelands so that their grazing capacity may be reduced to the extent of causing desertification (Sharma *et al.*, (2007). Therefore, in Zimbabwe where over 70% of the rural population entirely uses fuel wood as a source of power (Marongwe, 2002) and in the era of acute electricity load shedding in the urban subsystem, bush cutting is critical in rangelands degradation. Investigations by Chigumira, (2010) in three farms in Kadoma district revealed that because of the shrinkages in the economy, hyperinflation and reduced incomes from crop production, most households particularly those that are resource poor, communities resorted to off farm sources of income particularly through intensive utilisation of their natural environment. These included intensive sale of firewood which have consequently contributed to decreases in woodland and bushland and conversions to cultivation/grassland at the three sampled farms. Ambiguity in property also undermines rangelands. Haji-Rahimi and Ghaderzadeh, (2008) notes that after the passage of nationalization laws in 1963, all natural resources including rangelands were vested to government and the zeal for judicious management waned and the backlash was severely felt in the rangelands. For Zimbabwe, Chigumira (2010) and Chigwenya (2010) attribute rangeland degradation to

poor environmental governance and institutional decay respectively.

b) *Institutional framework for current rangeland management in Zimbabwe*

A number of legal and policies pertinent to the environment exist in Zimbabwe. These include Environmental Management Act cap 20: 27, Communal Forest Produce Act cap 19:04, Forest Act cap 19:05, Rural District Councils Act cap 29:13 and the Parks and Wildlife Act cap 20:14. However, it should be observed that there is no legislation or policy that specifically deals with rangelands as a distinct resource. This probably explains the degradation obtaining at rangelands as a neglected resource. At the same time pertinent policies include Wildlife based land reform policy, the Integrated Conservation Plan for the Fast Track land reform program, Millennium Development Goals (MDGs), National Environmental policy, National Action programme on the United Nations Convention to Combat desertification and drought, Water management strategy and the National Action plan to the Johannesburg Plan of Implementation. However, often the letter and spirit of these policies are not followed.

III. RESEARCH METHODOLOGY

a) *Study area*

The study area lies about 18 km from Gwanda town along the Gwanda-Bulawayo road. The A1 resettlement area covers about 6000 hectares. The study area is located between 20° 53'S and 20°45'S and between 28 ° 57'E and 29 ° 03' E. Vegetation physiognomic structure is essentially tree bush/ savanna (TBS) with *Colospospermum mopane* comprising the canopy cover. Dominant tree species include *Colospospermum mopane*, *Dichrostachys cineria* and *Terminalia sirecea*.

b) *Methods*

Based on the sample size calculator, a total of 30 households were selected and questionnaires were administered on each household, randomly selected to get their perspective on rangeland degradation. Interviews were also conducted with key informants such as traditional leaders and government extension workers from Agricultural technical and extension (Agritex) services, the Environmental Management Agency and Forestry Commission. The interviews sought to extract information related to the role of each institution in rangeland management and also to identify challenges and opportunities for each institution. The Statistical Package for Social Sciences (SPSS) version 17.0 was used to analyze quantitative data generated from questionnaires. Essentially frequencies and descriptive statistics were run.

IV. RESULTS AND DISCUSSION

a) Demographics

The respondents comprised people from different age-groups. Sixty percent of people interviewed were at least 41 years of age and 30% were

between 30 and 40 years of age while only 10% accounted for the 30 and below age group (Figure 1). Hence, all important age categories were represented. In terms of gender, the majority interviewed were males (63%) and the rest were females (37 %).

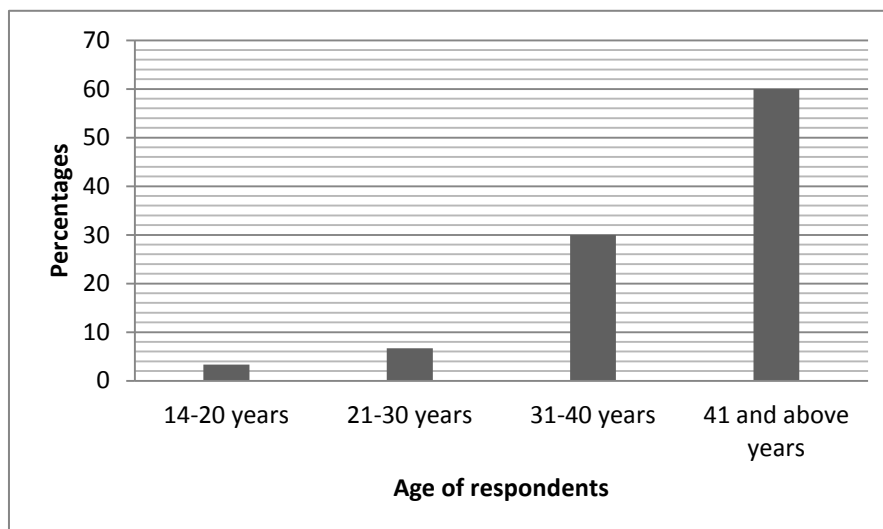


Figure 1 : Age of respondents in the survey

About 67% of people interviewed have been residing in Insindi resettlement for over three years suggesting that land uptake was very high at the time of

the land reform. At the same time 30% have been resident in the area for the past 2 years while only 3% had been resident in the area for less than a year.

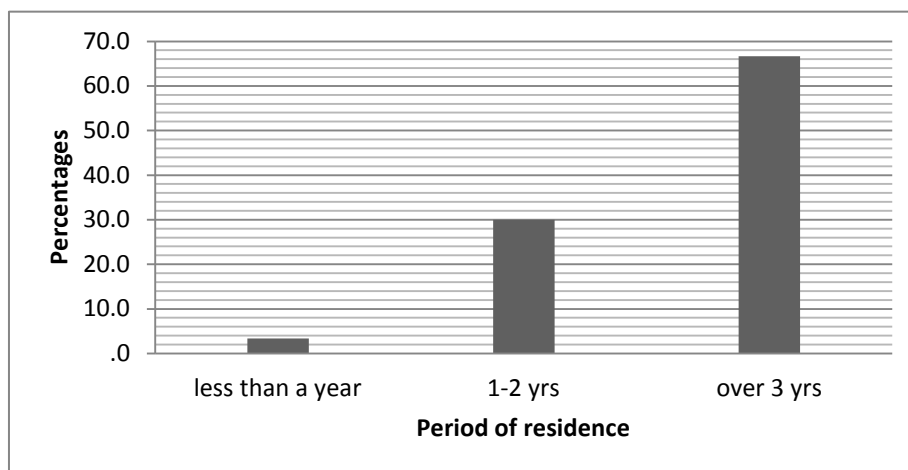


Figure 2 : Period of years resident in Insindi resettlement area

b) Livestock ownership and importance of rangelands

According to respondents, the sampled households owns 29 goats and 30 donkeys and cattle

as (Table 1), making a total livestock population of about 89. On average each household owned two goats, one donkey and one cattle.

Table 1 : Livestock ownership in Insindi resettlement area

	Goats	Donkeys	Cattle
Number	29	30	30
Mean	1.55	1.37	1.47

A cross tabulation of the importance of rangelands and the number of livestock owned revealed that regardless of livestock ownership, grazing use was

considered an important option as can be seen from figure 3 below. It shows that people appreciate the role of grazing to the local economy. However, it is also clear

that those with a few livestock also give more weight to mining of natural resources as a critical use. For example, for those with less than 10 goats, four people indicated that the rangeland was important for mining of natural resources and so was five people with four and less donkeys. Finally, five people with five and less cattle also recognized natural resource mining as an important rangeland use option. The results suggest that the different social groups of the community appreciated

the importance of rangelands in as far as grazing is concerned irregard of livestock ownership. People who had fewer or no livestock also appreciated other roles that rangelands play such as aesthetics and mining of natural resources. The recognition of the invaluable role of rangelands is reflective of the significance of the pastoral economy to the locals. This confirms the long held convention that semi arid areas are the prime beef producing areas in Zimbabwe.

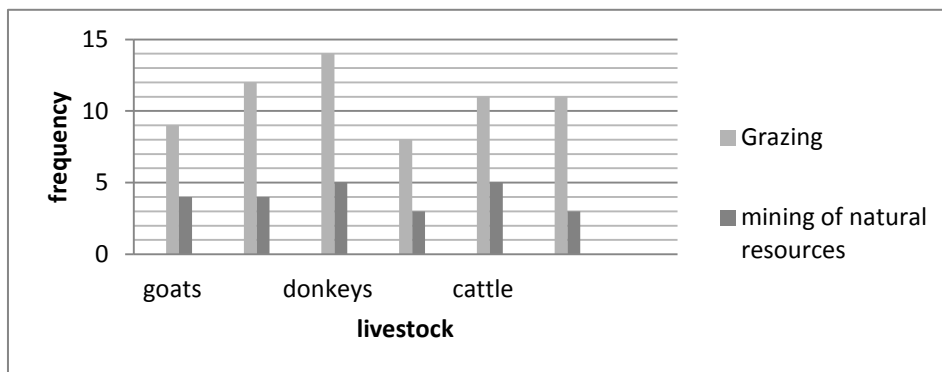


Figure 3 : Cross tabulation of livestock owned and perception of rangeland importance

c) Rangeland condition

The majority of people (43%) interviewed generally felt that their rangelands were in good condition while 33% felt that it was average and 23% felt that it was poor (Table 2). The results imply that rangelands are under threat. In terms of healthy rangeland indicator, an overwhelming 83% indicated that high vegetation cover and absence of gullies were indicators of a health rangeland. At the same time 17%

indicated that availability of water and more wildlife were indicators of a healthy rangeland.

d) Causes of rangeland degradation

In terms of causes of rangeland degradation, 73% indicated that drought, tree cutting and overstocking were the key driving forces behind rangeland degradation while 27 % attributed rangeland degradation to lack of institutions Table 3.

Table 3 : Causes of rangeland degradation

Causes of Rangeland degradation	Percentage of respondents
Drought, tree cutting, overstocking	73%
Lack of institutions for management	27%
Total	100%

About 90% of respondents indicated that soil erosion and lack of palatable grasses were key forms of the manifestation of the process of rangeland degradation while 10% also felt that the presence of alien invader plants contributed to rangeland degradation. The results may be indicative of the fact that invader species are not a significant problem in Insindi.

e) Need for rangeland regulation

There was a general consensus that rangelands have to be regulated mainly because the community was not well organized and had no common goals. At the same time about 9 respondents indicated that there was need for rangeland regulation given that

degradation was already high and about seven people felt that government has to regulate rangelands owing to its paternalistic role.

i. Ways of controlling rangeland degradation

About 43% of respondents indicated that rangeland degradation can be reduced by controlled grazing while 40% argued that the development or strengthening of local institutions could be critical in reducing rangeland degradation. About 17% indicated that degradation can be reduced by destocking, revegetation and reseedling (Figure 4).

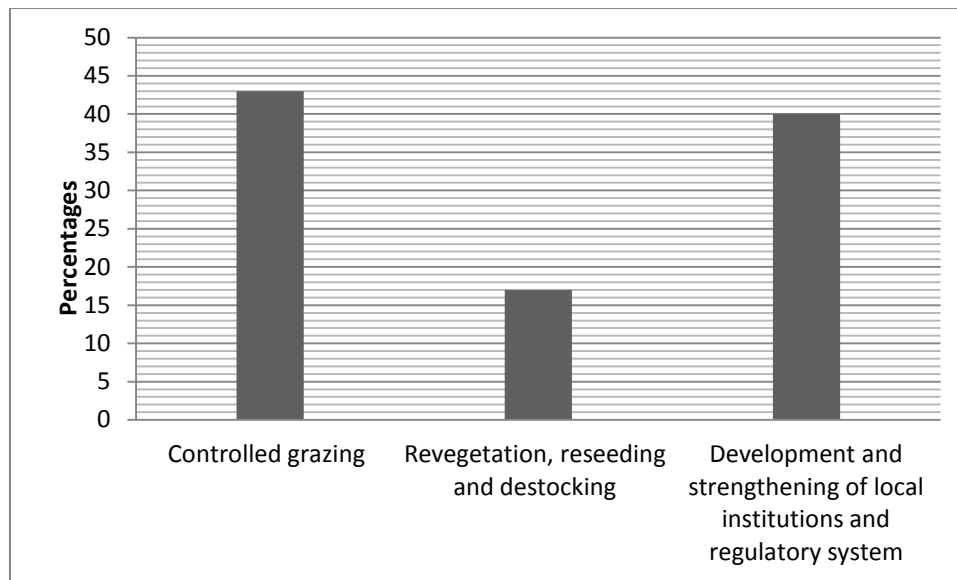


Figure 4 : Ways of reducing rangeland degradation

ii. *Institutions for rangeland management*

About 77 % of respondents indicated that institutions of rangeland management existed while 23% said such institutions were nonexistent in the area.

Existing institutions are predominantly community based (Figure 5). 50% of respondents indicated that community based institutions in the form of the neighbourhood watch committee and the

committee of seven were instrumental in rangeland management issues. 30% of respondent were of the opinion that there were no institutions for rangeland management at all and 20% indicated that government agencies were a key institutes in natural resources management. This means that government and Non Governmental Organizations (NGOs) are playing a peripheral role in rangeland management.

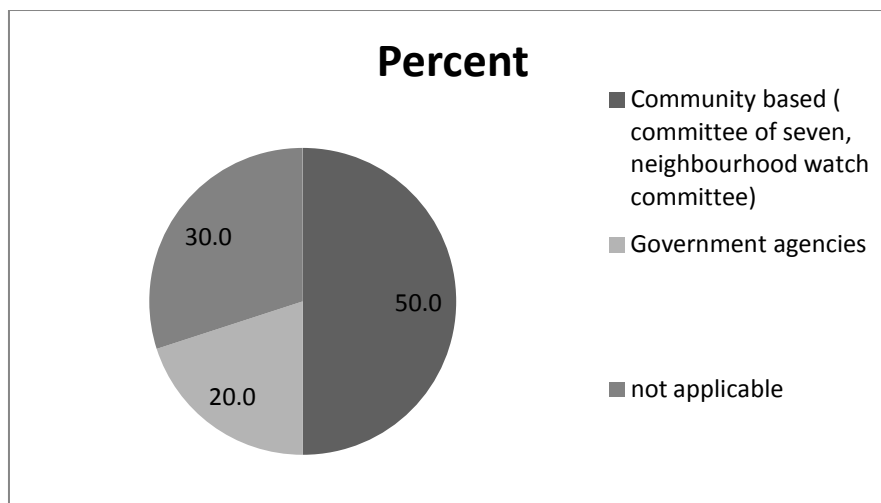


Figure 5 : Institutions for rangeland management in Insindi resettlement area

iii. *Effectiveness of institutions*

About 20% of respondents indicated that community based institutions are more effective while 40% indicated that they were not effective. About 10% of respondents felt that although government agencies were existed, they were not effective. About 30% indicated that institutions were neither there nor effective (figure 6). It is therefore clear that community based institutions play a critical role in rangeland management, albeit ineffective.

The results also suggest that people understand the dynamics of rangeland deterioration and also insights to sustainable utilization. No institutions existed to engender sustainability. Admittedly, legislation such as the Traditional leaders' Act, Communal Lands Forest Produce Act cap 19:04, Environmental Management Act cap 20:27, Forest Act cap 19:05 and Rural District Councils Act cap 29:13 are critical in rangeland management. However, these are peripheral to the issue with a consequent of unsustainable use. At the same time local institutions for natural resources

management that were said to be in existence are either the neighbourhood watch committee or the committee of seven established under the auspices of the Integrated land reform policy. Both institutions lack capacity to deal with rangeland issues. Apparently the core business of the former is to provide security services for the resettlement area and issues of rangelands are just but incidental to their core business. Hence degradation will remain a thorny issue in this area. The latter was established to enhance sustainable management of natural resources in the fast track resettlement areas. However, they were never trained in natural resource management. In addition, they do not wield as much power as they should with respect to environmental governance since there were no intensive environmental awareness campaigns carried out as a prelude to the land reform and also not everyone

recognize the environment as a common rallying point. Over and above the results suggest that there are no effective institutions either community based or otherwise for sustainable development of rangelands in fast track areas. This confirms studies by Chigumira, (2010) and Chigwenya, (2010) that environmental governance institutions have broken down in the country due to a decade of political and economic crises with a consequent backlash on the receiving environment. Attached to this, the results suggest that no environmental management programmes are currently going on in the resettlement area since the majority did not meaningfully participate in rangeland management and those who participated were only providing security in the resettlement area. This is undoubtedly a serious gap which needs to be addressed.

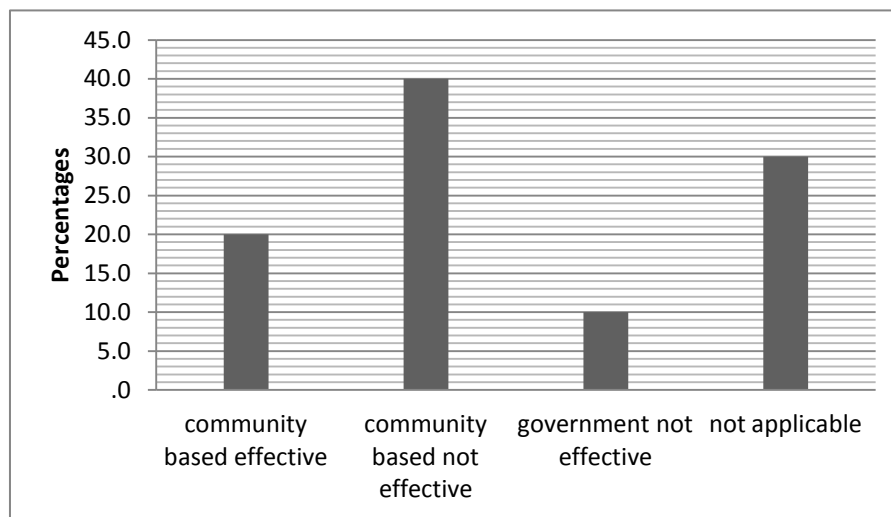


Figure 6 : Effectiveness of institutions in rangeland management

iv. *Participation of resettled farmers on rangeland management*

About 60% indicated that they participated in rangeland rehabilitation while 40% indicated that they are not involved in any rangeland management initiatives. Apparently the 60% that claimed participation in rangeland management were essentially involved in security services for the entire resettlement area, rather than actual rangeland management.

V. CONCLUSIONS

Admittedly, the fast track land reform, particularly smallholder schemes has led to community disturbance but rangeland condition is still relatively good to support the farming communities. Therefore, the fast track land reform has not entirely destroyed the agricultural as Campbell, (2008) would want us to believe. It can also be concluded that there is a dearth of requisite institutions and legislation for sustainable management of common property resources such as rangelands in Zimbabwe. There are relevant legislation

such as the Environment Management Act, Communal Forest Produce Act and the Forest Act but enforcement is weak resulting in unregulated rangeland use. For example law enforcement agents find it difficult to enforce the Communal Lands Forest Produce Act in resettlement areas because it was not gazetted for such areas. To a greater extent, issues of rangeland management are just but incidental to these pieces of legislation. Hence, the need to develop institutions for sustainable management of rangelands in smallholder resettlement areas cannot be overemphasized. Therefore, disturbances caused by smallholder resettlements in semi arid regions of Zimbabwe if not properly managed could have serious and irreversible environmental effects in the near future. This could also undermine the local beef and wildlife economy which form the backbone of livelihoods in such areas. It is recommended that institutional development for management of rangelands as a common property resource would be critical in enhancing sustainable utilization rangelands. This should be accompanied by

revamped extension packages to promote environmental awareness and the importance of rangelands in the community. Also, strategic environmental impact assessments must be carried out by government in resettlement areas to militate against factors that are likely to cause more adverse rangeland degradation. Strategic environment assessments help inform policy, programmes and projects and could be a useful tool for the sustainable utilization of rangelands of rangelands in the smallholder resettlement areas. There is also a need to resuscitate paddock fences in the resettlement areas. The results of this present study showed that open grazing inadvertently led to overgrazing. Therefore, the resuscitation of the paddock system will go a long way in reducing overgrazing since livestock movement will be controlled with a consequent of reducing rangeland degradation. In order to achieve full benefits of the fast track land reform programme, technical support would be required to reduce rangeland degradation in the smallholder resettlement areas.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Campbell, H. 2008. The Zimbabwean Working Peoples: Between a Political Rock and an Economic Hard Place, Association Concerned Africa Scholars Bulletin 80: Special Issue on Zimbabwe 2. <http://concernedafricascholars.org/bulletin/issue80/Campbell>
2. Chigumira, E. 2010. My Land, My Resource: Assessment of the Impact of the Fast Track Land Reform Programme on the Natural Environment, Kadoma District, Zimbabwe, Livelihoods after Land Reform in Zimbabwe Working Paper 14, http://lalr.org.za/zimbabwe/zimbabwe-working-papers...14_Chigumira
3. Chigwenya A. 2010. Institutional decay and environmental degradation in ward 22, Gutu West, Zimbabwe, *Journal of Sustainable Development in Africa*, 12(1): 323-333. <http://jsd-Africa.com/...Spring2010>
4. Feltoe, G.. (2004). *The on-slaught against democracy and rule of law in Zimbabwe in 2000: where there any alternatives to land invasions?* In Barry H. D ed. (2004): Rethinking land, state and nation in the context of crisis, Weaver Press, Harare.
5. Haji-Rahimi and Ghaderzadeh. 2008. The challenges of sustainable management in renewable resources in Iran: a SWOT, in *America-Eurasian J. Agricultural and Environmental Science*, 3(2): 194-199. 2008. [http://idosi.org/aejaes/jaes6\(5\)/7.pdf](http://idosi.org/aejaes/jaes6(5)/7.pdf)
6. Marongwe N., (2002): Conflicts over land and natural resources in Zimbabwe, ZERO Regional Environmental Organization, Harare.
7. Mbereko, A. 2010. An Assessment of the Outcomes of "Fast Track" Land Reform Policy in Zimbabwe on Rural Livelihoods: The Case of Gudo Ward (Mazvihwa Communal Area) and Chirere area (A1 resettlement Area), Livelihoods after Land Reform in Zimbabwe, Working Paper 3, University of Zimbabwe Lake Kariba Research Station. <http://lalr.org.za/zimbabwe/zimbabwe-working-papers...Mberekko>
8. Moyo, S. and Yeros, P. 2009. Zimbabwe ten years on: Results and prospects, Livelihoods after land reform: the poverty impacts of land redistribution in Southern Africa <http://lalr.org.za>
9. Sharma, E., Zhaoll, Y., and Saharma B. 2007. International Centre for Integrated Mountain Development (ICIMOD) rangeland program for the Hindu Kush-Himalayas, *Mountain Research and Development*, 27(2), 174-177. <http://bioone.org>